

Fast-track is more than physiological anaesthesia

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The role of the anaesthesiologist, nowadays, is not just limited to patient care in the operating room but also plays a key role in the ERAS (Enhanced Recovery After Surgery) protocol, including management of perioperative analgesia, infusion therapy, nutrition and efficient rehabilitation in order to obtain the shortest hospitalization with the lowest rate of adverse complications for patients undergoing surgery.

The fast-track protocol was first designed for patients undergoing major abdominal surgery, but its principles were soon extended to other surgical specialities, including orthopaedic and vascular surgery. As the most advanced technical equipment and drugs are often insufficient to successfully manage serious conditions, their synergic use and mutual purposeful coordination are even more important.

Cooperation of the whole team (in particular of the anaesthesiologist and the surgeon) is necessary, as demonstrated by the workgroup of Evidence Based Medicine in Surgery of the Canadian Association of General Surgeons and the American College of Surgeons.

Nutritional support. Nutritional status, fluid intake before surgery, special nutritional products and intestinal preparation play a crucial role in the perioperative period (1). Perioperative nutritional care should focus particularly on detection of any preoperative malnutrition and potential nutrition problems in the postoperative period, compensation of perioperative hyperglycaemia and management of insulin resistance through preoperative administration of appropriate carbohydrate solutions, early enteral nutrition and special nutritional immunomodulative products to support the gastrointestinal tract. Randomized clinical studies have shown that ad-

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ministration of such products reduces morbidity, mortality and the length of hospitalization. Oral administration of prokinetics, together with early enteral nutrition and proper analgesia, reduce ileus after major gastrointestinal surgery (2).

Fluid strategy. Proper fluid administration policy in the perioperative period is of crucial importance (3). Positive cumulative fluid balance is known to cause increased perioperative morbidity and mortality.

Moreover, fluid restriction does not cause circulatory instability or renal failure and contributes to shorter hospitalization (4).

Maintenance of normothermia. Hypothermia and all its adverse effects (acid-base equilibrium disturbance, haemocoagulation impairment, wound infection) can be prevented by warming intravenous fluids to body temperature.

Analgesia. Insufficient analgesia may cause organ hypoperfusion, worsen wound healing, and cognitive functions and increase postoperative morbidity. Epidural or spinal analgesia are the first choice techniques for major abdominal and orthopaedic surgeries worldwide.

Although providing outstanding pain alleviation throughout the perioperative period, large clinical studies have failed to demonstrate that this approach shortens hospitalization and provides any other essential benefits to the patient when com-

pared to other techniques. Nevertheless it is considered the gold standard of perioperative analgesia for thoracotomy and laparotomic gastrointestinal surgical procedures (5). Peripheral nerve blocks or intravenous, preperitoneal, intraperitoneal or subfascial administration of opioids and non steroidal anti inflammatory drugs and lidocaine seem to be safer, more efficient, and more economic options in selected patients (6).

Preadmission counselling. Proper psychological preparation of the patient and anxiolytics as part of the evening premedication may improve outcome, shorten hospitalization and decrease medical treatment expenses.

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